## Maker Space EQUIPMENT: BENCH GRINDER

Long pants are required to be worn at all times when operating this equipment.

Job/Task Step	Hazard	Hazard Control Method/PPE
Inspect Equipment/PPE Check/Buddy System		<ul> <li>Don all required PPE for use of the Grinder. Approved Safety Glasses with side shields, Face Shield, Long Pants, Closed Toe Shoes, and Ear Plugs.</li> <li>Additional foot protection is needed with working with heavy parts and pieces.</li> <li>Tuck in shirt, not loose fitting clothing or jewelry.</li> <li>Long hair must be pulled back or tucked into a hat.</li> <li>Ensure guard is in place over the grinding wheel prior to beginning. Pull the guard down in front of the wheel to prevent injury to eyes and face.</li> <li>Ensure area is clear in front of the grinder to prevent Slip/Trip/Fall hazards.</li> <li>Work with the supervisor of the space to review operation and ensure all risks have been addressed.</li> <li>Ensure no combustible or flammable material is within 30 feet of the grinder during operation.</li> </ul>
Start the machine and slowly contact material to the grinding wheel	Abrasions/Laceration, Pinch Points, Falling Objects, Eye Injury, Noise Hazard	<ul> <li>Be aware of hand and body placement during grinding/buffing activities.</li> <li>Hold onto the material being grinded/buffed tightly.</li> <li>Use the base of the machine in front of the wheel to support the material being grinded/buffed to prevent kick back.</li> <li>Wear Gloves.</li> <li>Be aware of falling objects and/or sparks caused from grinding activities.</li> <li>Wear Closed Toe Shoes and Long Pants.</li> </ul>

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		<ul> <li>Grinding and/or buffing activities will cause fly debris.</li> <li>Wear Safety Glasses and a Face Shield while using the bench grinder.</li> <li>Wear ear plugs due to the potential of high noise hazards.</li> </ul>
Turn off the grinder and clean up the area	Abrasions/Laceration, Pinch Points, Flying Debris, Muscle Strains	<ul> <li>Wheels will not immediately stop. Do not touch the wheel to force it to stop.</li> <li>Wait for the wheels to completely stop turning prior to moving on.</li> <li>Some material that is being cleaned up may be sharp or hot.</li> <li>Wear gloves.</li> <li>Be aware of sweeping activities and wear safety glasses to prevent flying objects from causing eye injuries.</li> <li>Use proper lifting techniques while cleaning up the area.</li> </ul>

## Lockout/Tag out information

Only Authorized Individuals who completed the appropriate Lockout/tag out training may complete lockout/tag out.

Individuals must review the MakerSpace Lockout/Tag out Procedure prior to applying locks and tags.

Before shutting down the equipment, authorized individual must have knowledge of the type and magnitude of the energy to be controlled and the methods or means to control the energy.

If your Supervision has not authorized you to perform LO/TO, you must get an Authorized Individual to do so.

- The equipment is plugged into a wall socket not hard wired.
- After notifications have been made, the authorized individual may unplug the printer and apply the can cover over the plug and apply the lock.

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- The key must stay in the possession of the authorized individual at all times.
- The tag must be filled out completely with the following;
  - o Name
  - Contact information
  - o Date

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- Reason for LO/TO
- Once the job is completed, the lock and tag may be removed by the same authorized individual that applied it.
- If the job last longer that the authorized individual's shift, transfer may be made and must follow the MakerSpace LO/TO procedure.

